

APPARATUS AND METHOD FOR TREATING POLLUTANTS IN A GAS
USING HYDROGEN PEROXIDE AND UV LIGHT

Abstract of the Disclosure

An apparatus for treating pollutants in a gas may include a source of hydrogen peroxide, and a treatment injector for creating and injecting
5 dissociated hydrogen peroxide into the flow of gas. The treatment injector may further include an injector housing having an inlet, an outlet, and a hollow interior extending therebetween. The inlet may be connected in fluid communication with the source of
10 hydrogen peroxide so that hydrogen peroxide flows through the hollow interior and toward the outlet. At least one ultraviolet (UV) lamp may be positioned within the hollow interior of the injector housing. The at least one UV lamp may dissociate the hydrogen
15 peroxide flowing through the tube. The dissociated hydrogen peroxide may be injected into the flow of gas from the outlet for treating pollutants, such as nitrogen oxides.

Approved for release